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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,486	02/24/2006	Weiqi Wang	2185-0789PUS1	3433

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EXAMINER	
BIANCHI, KRISTIN A	

ART UNIT	PAPER NUMBER
1626	

NOTIFICATION DATE	DELIVERY MODE
03/18/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/569,486	WANG ET AL.	
	Examiner	Art Unit	
	KRISTIN BIANCHI	1626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 December 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2 and 5-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 5-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/16/2008*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1, 2 and 5-9 are pending in the instant application. Claims 3 and 4 were cancelled by way of amendment filed on December 16, 2008. Claims 1, 2 and 5-9 are rejected.

Priority

It is noted that a copy of the JP 2003-384566 priority document was obtained from the International Bureau of WIPO, thereby fulfilling the requirements of 35 USC § 119(b).

Information Disclosure Statement

The information disclosure statement filed on December 16, 2008 was considered and a signed copy of form 1449 is submitted herewith. It is noted that the JP 11-217356A document has been fully considered.

Response to Amendment and Remarks

The amendment and remarks filed on December 16, 2008 were fully considered and entered into the application. In regards to the 35 U.S.C. 103(a) rejection of claims 1-3 and 5-9, Applicant argues that the cited art fails to provide any reason or rationale that would allow one of ordinary skill in the art to arrive at the instant invention as claimed. In view of the amendment and this argument, which has been persuasive, the the 35 U.S.C. 103(a) rejection has been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 5, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 03/024958 (Reddy et al.).

Determining the scope and contents of the prior art
Reddy et al. discloses the preparation of 1,1,1-Trifluoro-4-(4-methylphenyl)-3-buten-2-one (page 13) through the reaction of toluene and 4-ethoxy-1,1,1-trifluoro-3-buten-2-one in dichloromethane in the presence of zinc chloride.

Ascertaining the differences between the prior art and the claims at issue
The reaction conditions (i.e. the type of acid used in the reaction and the solvent in which the reaction is carried out) of the reaction disclosed in Reddy et al. are different than the reaction conditions of the instant claims.

Establishing a prima facie case of obviousness
It is common practice for a person skilled in the art to carry out a synthesis using different reaction conditions in an attempt to optimize the synthesis. Further, the courts have stated that changes in process conditions of an old process does not impart patentability in the absence of unexpected results. In re Boesch, 205 USPQ 215 (1980). In re Aller et al. (CCPA 1955) 220 F2d 454. In re Dunn, 146 USPQ 479 (i.e. use of a conventional solvent in an otherwise known process is not a patentable modification).

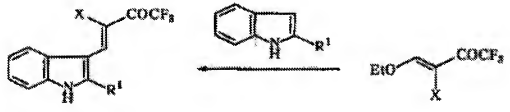
Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to carry out the reaction disclosed in Reddy et al. using different acids and solvents and to arrive at the reaction of the instant claims. One of ordinary skill would have reasonable expectation of success in practicing

the instantly claimed process. The motivation would have been to find the optimal conditions for the synthesis of 1,1,1-Trifluoro-4-(4-methylphenyl)-3-buten-2-one, which is used as an intermediate for the preparation of compounds of formula (I) which are particularly useful in the treatment of inflammation and inflammation-related disorders (page 1, lines 5-9).

Thus, a *prima facie* case of obviousness has been established.

Claims 1, 2, 5, 6, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanin et al. (Russian Journal of Organic Chemistry Vol. 35 No. 5 1999).

Determining the scope and contents of the prior art
Sanin et al. discloses the following reaction



IIIa (78%)
IIIb (84%)
IVa (56%)

I, II

wherein R1 is methyl and X is H for IIIa and R1 is phenyl and X is H for IVa (page 712). The reaction is carried out in the presence of ZnCl2 and in methylene chloride (page 712, Trifluoromethyl-containing enones III-VI (general procedure)).

Ascertaining the differences between the prior art and the claims at issue
The reaction conditions (i.e. the type of acid used in the reaction and the solvent in which the reaction is carried out) of the reaction disclosed in Sanin et al. are different than the reaction conditions of the instant claims.

Establishing a prima facie case of obviousness
It is common practice for a person skilled in the art to carry out a synthesis using different reaction conditions in an attempt to optimize the synthesis. Further, the courts have stated that changes in process conditions of an old process does not impart patentability in the absence of unexpected results. In re Boesch, 205 USPQ 215 (1980). In re Aller et al. (CCPA 1955) 220 F2d 454. In re Dunn, 146 USPQ 479 (i.e. use of a conventional solvent in an otherwise known process is not a patentable modification).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to carry out the reaction disclosed in Sanin et al. using different acids and solvents and to arrive at the reaction of the instant claims. One of ordinary skill would have reasonable expectation of success in practicing the instantly claimed process. The motivation would have been to find the optimal conditions for the synthesis of trifluoromethyl-containing enones since various heterocyclic compounds containing a CF3 group became the subject of numerous studies due to their high biological activity and trifluoromethyl α,β-unsaturated ketones are promising starting compounds for the synthesis of various carbo- and heterocycles and their derivatives containing a trifluoromethyl group (page 711, 1st paragraph).

Thus, a *prima facie* case of obviousness has been established.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KRISTIN BIANCHI whose telephone number is (571)270-5232. The examiner can normally be reached on Mon-Fri 7am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on 571-272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kamal A Saeed/
Primary Examiner, Art Unit 1626

Kristin Bianchi
Examiner
Art Unit 1626

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